

REMARKS

Reconsideration of the issues raised in the above referenced Office Action is respectfully solicited.

The amendment to paragraph 27 of the specification merely changes a reference numeral. Approval is respectfully requested.

There is no indication that the originally filed formal drawings have been approved. Confirmation that the drawings are approved is respectfully requested.

Applicants appreciate the allowance of Claim 3. Claim 3 has been amended to address an informality therein.

The rejection of Claims 1 and 2 under 35 USC §102(b) as being anticipated by Nicholson, U.S. Patent No. 5 240 263 has been considered.

Nicholson discloses metallic sealing rings that have one open side. Column 4, lines 50-56 specify that the sealing ring is formed by a median weld line 12 connecting to pre-formed half-seals in a plane perpendicular to the seal ring axis.

Applicants' amended Claim 1 recites "two metallic coned disc springs". This arrangement differs from the single ring of Nicholson having a somewhat conical shape formed by two half-seals. Further, Claim 1 recites that each disc spring has "a central circulation opening therethrough". As best understood, the pre-formed half-seals of Nicholson do not have any openings therethrough. Further, the joined seal ring illustrated in Figure 24 of Nicholson only has a single opening, which does not extend therethrough.

Claim 1 further recites "the two coned disc springs being combined while being oppositely directed and the outer diameter peripheral edge portions being welded and joined about the circumferences thereof". Nicholson does not have two coned disc springs and thus can not have the claimed physical arrangement.

Claim 1 further recites that "a peripheral portion about the circulation opening rises having an arc-like curved

surface, the surface being inclined upwardly and extending outwardly in a radial direction", and "the surface then being inclined downwardly and extending outwardly in the radial direction to an outer diameter peripheral edge portion". This arrangement about a peripheral portion of a circulation opening and extending to an outer diameter peripheral edge portion is not present in Nicholson.

Independent Claim 2 recites "two metallic coned disc springs having identical shapes, each said disc spring having a circulation opening for a fluid in a central flat portion". As discussed above, Nicholson does not disclose or suggest two metallic coned disc springs. Further, Nicholson does not disclose or suggest the two disc springs each having a circulation opening, much less a circulation opening in a central flat portion.

For the above reasons, independent Claims 1 and 2 distinguish Nicholson.

The rejection of Claim 2 under 35 USC §102(b) as being anticipated by Nicholson, Great Britain Patent No. 2 235 260 (GB '260 patent) has been considered.

The GB '260 patent discloses a seal ring having a plurality of crossed fingers 17 oriented inwardly about the entire ring. As shown in Figure 3A, ring elements each have a flange 23 at their outer circumference. The flanges 23 are welded to unite the ring elements at a circumferential weld line as shown in Figure 3B. Thus, the two ring elements are joined and have a plurality of inwardly oriented fingers. Therefore, the seal ring of the GB '260 patent is closed about an outer periphery.

Applicants' Claim 2 recites "each said disc spring having a circulation opening for a fluid in a central flat portion". It is unclear what part of the seal ring in the GB '260 patent comprises a circulation opening in a central flat portion.

Claim 2 further recites "a seal surface that extends outwardly and upwardly from the flat portion and warps near an outer diameter peripheral edge portion to define an arc-like

curved surface". This shape does not appear to be present in the GB '260 patent. The GB '260 patent shows the elements being joined at an outer peripheral edge portion thereof. This differs from the "central flat portions being welded and joined with each other" as recited in the last two lines of Applicants' Claim 2.

For the above reasons, reconsideration and withdrawal of the rejection of Claim 2 under 35 USC §102(b) as being anticipated by the GB '260 patent is respectfully requested.

The rejection of Claim 2 under 35 USC §102(e) as being anticipated by McLean, U.S. Patent No. 6 431 825 has been considered.

McLean discloses a seal for use between two static parts. The seal includes a carrier piece 5 and a second part 9. The seal does not include any openings.

Independent Claim 2 recites "two metallic coned disc springs having identical shapes". The carrier piece 5 and second part 9 illustrated in Figure 1 of McLean do not have identical shapes.

Claim 2 further recites "each said disc spring having a circulation opening for a fluid in a central flat portion". There is no disclosure of an opening through either the carrier piece 5 or the second part 9 of McLean, much less such openings being in a central flat portion.

For the above reasons, reconsideration and withdrawal of the rejection of Claim 2 as being anticipated by McLean is respectfully requested.

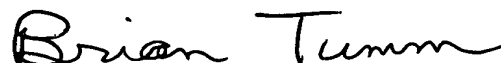
Claims 4-8 have been added and further distinguish the applied prior art.

Claims 4 and 7 recite that the central circulation openings are in axial alignment with each other and Claims 5 and 8 recite that the central circulation openings are circular. These features, in combination with the features recited in parent Claims 1 and 2, further distinguish the applied prior art.

Dependent Claim 6 is allowable for the reasons set forth above with respect to parent Claim 1.

Further and favorable reconsideration is respectfully solicited.

Respectfully submitted,



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